



PERMIT NO. ALS000032

Construction (ESPC) Site Storm Water Runoff Control

Permit Part II B.4.

CONSTRUCTION ESPC



CONSTRUCTION (ESPC) SITE STORM WATER RUNOFF CONTROL

PERMIT PART II B.4.

CONSTRUCTION SITE STORM WATER RUNOFF CONTROL PROGRAM SUMMARY

In accordance with the MS4 NPDES permit, the City of Birmingham shall develop/revise, implement and enforce an ongoing program to reduce, to the MEP, the pollutants in any storm water runoff to the MS4 from construction sites. Under the City of Birmingham Soil Erosion Control Ordinance, the City requires:

1. Requires all applicable construction sites to obtain coverage under ADEM NPDES General Permit ALR1000;
2. Requires effective erosion and sediment controls on construction sites;
3. Requires operators to control the discard of waste construction materials such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site;
4. Requires and reviews Best Management Practices plans for construction sites to ensure the selection of effective erosion and sediment controls are consistent with the Alabama Handbook for Erosion Control, Sediment Control, and Stormwater Management on Construction Sites and Urban Areas "Alabama Handbook" Latest Edition;
5. Through the City 311 Department receives reports from the public regarding pollution discharge from construction sites;

Erosion, Sediment, Prevention and Control (ESPC) in the City of Birmingham:

- ❖ Best Management Practices Plan
- ❖ ESPC Ordinance
- ❖ MS4 NPDES Permit
- ❖ "Alabama Handbook"
- ❖ Minimize Land Disturbance
- ❖ Temporary Sedimentation Basins
- ❖ Temporary Land Cover
- ❖ Contractor Education
- ❖ Inspector Training
- ❖ Litter Removal
- ❖ Construction Site Waste Disposal
- ❖ Erosion Prevention
- ❖ Sediment Control
- ❖ Storm Drain Inlet Protection
- ❖ Mulch, Seed and Fertilizer
- ❖ Solid Sod
- ❖ Slope Stabilization



6. Provides inspections of construction sites to verify use of proper maintenance of appropriate BMPs in accordance to the schedule below;
7. Provide construction site inspection staff QCI training in accordance with ADEM Admin. Code r. 335-6-12 or the Alabama Construction Site General Permit;
8. Develop a construction site inspection checklist;
9. Implement an enforcement response plan (ERP) setting out the City's potential responses to violations through progressively stricter actions as needed to achieve compliance. The ERP includes a system for tracking formal actions and ADEM referrals.
10. Make available a list of education and training materials and resources to construction site operators in the appropriate application of maintenance of erosion and sediment controls; and
11. Post on the City Website the Erosion, Sediment, Prevention and Control Ordinance.

PERMIT ISSUANCE PROCEDURES:

At the time of application, the Applicant is informed that a ADEM permit is required for projects with disturbed area of one acre or greater. An NOI Notice to ADEM is required prior to permit issuance.

SOIL EROSION CONTROL ORDINANCE

The City of Birmingham Soil Erosion and Sediment Control Ordinance (Ordinance 99-131) was enacted in 1999 and regulates all construction sites regardless of disturbed area. Land disturbance sites are required to obtain a Soil Erosion Permit.

Single family Residential projects must submit an application and statement that they will follow the practices outlined in the Alabama Erosion Control Manual.

Commercial projects 1/2 acre or less must complete an ESPC application, a performance bond and a statement that they will follow the practices outlined in the Alabama Erosion Control Manual.

Commercial projects between 1/2 and 1 acre must complete an ESPC application, submit a BMP Plan, provide a performance bond and provide a design certification by a QCP.

CONSTRUCTION SITE WASTE MANAGEMENT

All land disturbance BMP plans are required to have a note that all discarded building materials, concrete truck washouts, chemicals, litter, and sanitary waste at the construction site are controlled to prevent adverse impacts to water quality. Proper handling and disposal is checked during site inspections.

COMPLAINT REPORTING SYSTEM

The City of Birmingham operates a 311 system that takes all citizen complaints and reports covering a wide variety of every day issues. The 311 system is discussed on the City Website.

There is a category in the 311 system for soil erosion construction site complaints. This is also discussed on the Stormwater Construction ESPC section of the Website.

Complaints taken by phone, email or on the 311 system are directed to the Construction Stormwater Department. The issue is investigated and the citizen is notified of the resolution.

SITE PLAN REVIEW

All land disturbance projects within the City are required to develop a Best Management Plan (BMP) prepared by a Qualified Credentialed Professional, and these plans are reviewed under the supervision of a Professional Engineer by a qualified plans reviewer or engineer. The ESPC review checklist is based on the City's MS4 NPDES Permit, ADEM CBMPP requirements and City ordinance requirements. The QCP must provide a completed checklist (Appendix A) and certification that the BMP were prepared in accordance to these regulations and the Alabama Manual for Erosion Control.

Land disturbing permits are issued to the applicant once the plans reviewers have reviewed and approved the Erosion and Sediment Control (ESC) Plan at the specific site being reviewed. All plans shall be reviewed with respect to the checklist (Appendix E). In cases where the appropriate information is not submitted or the application is determined to be incomplete, either a letter shall be sent to the applicant and/or the applicant's representative to notify them of the deficiencies. When all information required to find the application is complete and acceptable to the City, a building permit shall be issued. At that time, the applicant shall be given a copy of the permit and a copy of the Land Disturbing Fact Sheet (Appendix F).

Land disturbing permits are also required by the Alabama Department of Environmental Management for any land disturbance 1 acre or greater. At the time an application for a land disturbing permit is submitted, if the area of disturbance exceeds 1-acre, the applicant is informed that a state land disturbance permit from ADEM is also required.

The screenshot shows the 'Tidemark Advantage' software window. The title bar reads 'Tidemark Advantage [Thomas Miller - THM] - [Query By Example]'. The menu bar includes 'File', 'Edit', 'Options', 'Window', and 'Help'. The toolbar contains icons for 'Exit', 'New', 'Open', 'Task List', 'OBE', and 'GIS'. The main form area has a 'Case Type' dropdown set to 'Clearing and/or Earthwork Permit' and a 'Case Status' field. Below these are several input fields: 'Location:', 'Proposed Use:', 'Landslide Area:', 'Permit Type:', 'Property Type:', 'Bond Waiver:', 'Permit Fee Waived:', 'Penalty Fee:', and 'Penalty Fee Waived:'. To the right of these fields are 'Floodplain:' and 'Imp Watershed:' fields. A 'Dates' section contains 'Received:', 'Issued:', 'Target:', 'Expires:', and 'Completed:' fields. On the far right, there is a vertical sidebar with buttons for 'General', 'Quantities', 'Bond', and 'Inspection Req'. At the bottom of the form are buttons for 'Clear Query', 'Execute Query', 'Select', 'Done', 'Help', and 'Export'.

Also, the issued permit shall be entered into the Tidemark database (Example at left) for tracking purposes and a copy of the Land-Disturbing Permit along with a copy of the approved Erosion and Sediment Control Plans shall be assigned to an inspector.

CONSTRUCTION SITE INSPECTION PROCEDURES:

Useful Supplies:

- ✓ *Mud Boots*



- ✓ Rain Coat
- ✓ Digital Camera/Disks/Batteries
- ✓ Site Folder (Permit, Plans, etc.)
- ✓ Pens
- ✓ I.D. Badge
- ✓ Construction Site Inspection Report (See Appendix G)
- ✓ Field Guide for Erosion & Sediment Control on Construction Sites in Alabama

First Site Inspection:

The assigned inspector shall familiarize him(her)self with the project Erosion & Sediment Control Plans. At the time of inspection, the inspector shall introduce themselves to the site superintendent or contractor and review the site plan with them on site. Items the City Inspector needs to make obvious to the site contractor or superintendent includes:

- ✓ City of Birmingham Land-Disturbing Permit is clearly displayed on site
- ✓ Alabama Department of Environmental Management (ADEM) permit is posted on site (if the site disturbance is >1-acre)
- ✓ Copy of the approved, **Erosion & Sediment Control Plan** is being maintained on site
- ✓ During site inspection, it shall be the inspector's responsibility to document that all erosion controls (BMPs) have been installed according to the approved plans
- ✓ All information associated with site inspections shall be documented. Each inspection shall be recorded using the Construction Site Inspection Report shown in Appendix G. Items associated with the inspection shall be noted on the report, signed by the inspector. Copies of the inspection report shall be recorded with the permit hard copy file. Photos of the site shall be taken during each inspection, if necessary. On site notification of inspection findings shall be provided at time of inspection if possible
- ✓ Once the inspector's supervisor has reviewed the inspection report, if deficiencies are found onsite, it shall be faxed or emailed to the permit holder; all inspection report summaries are entered into Tidemark

Routine Inspection/Timing and Frequency of Inspections:

Site inspections shall be conducted on a routine basis throughout the duration of land-disturbing activity. Inspections shall be scheduled based on project phase. For example, during heavy grading activity, more frequent inspections are required. However, once interior building activity has begun, less frequent inspections are required.

The supervisor is responsible for developing inspection schedules that account for site prioritization. Typically, a site will be inspected at least 3-times; when BMPs are put in place; at some point during construction; and when the site has been stabilized and construction is still underway. Some sites will require more frequent inspections, which will be determined by City staff. This may include: public projects; projects which are 20-acres or larger; sites in watershed with waters that are considered by the State as impaired for sediments or; sites being operated by those that are considered chronic violators; sites that have been cited by ADEM; and sites that require re-inspection due to violations noted at a previous inspection. Inspection frequency guidelines are as follows:

- ✓ Initial inspections shall occur within 7-10 days after the permit is issued. If no activity has taken place, an inspection shall be rescheduled to occur within the next 7-10 days. If no activity has yet occurred, at this point inspections will be scheduled for 2-14 day cycles and 21-day cycles after that. If no activity occurs within 90-days, the permit is expired and the site operator will have to return to City Hall to re-establish permit coverage
- ✓ At a minimum, one inspection occurs when a permit is issued on sites less than one-acre or those with minimal land disturbing activities
- ✓ Routine inspections on sites with a normal priority shall be inspected at least every 60-days
- ✓ Routine inspections on high priority sites shall be inspected at least every 30-days. High priority sites include, but are not limited to:
 - Public projects
 - Sites with disturbed areas of 20-acres or greater
 - Sites within watershed impaired for sediments
 - Sites that have received violations from ADEM
 - Sites that are being operated by those that are considered as chronic violators
 - Sites having steep slopes or are considered as potential land slide areas
- ✓ When a site is stabilized it will become subject to less frequent inspections
- ✓ There are some permitted sites that do not require inspections and shall be noted on those permits by the Supervisor.

Guideline Summary of Inspections:

Routine Inspections	High Priority Inspections	Notes
<i>Initial inspection after BMP installation</i>	<i>Initial inspection after BMP installation</i>	7-10 days after permit issuance; If no activity has occurred, repeat in 7-10 days; If still no activity, inspect in 2-14 days, and every 21-days thereafter
<i>Every 60-days during construction</i>	<i>Every 30-days during construction</i>	
<i>Final inspection</i>	<i>Final inspection</i>	<i>When final stabilization of the site is completed</i>

All information associated with inspections shall be documented. Each inspection shall be recorded using the **Construction Site Inspection Report**, shown in Appendix G. Items associated with the inspection shall be noted on the report, signed by the inspector. Copies of the inspection report shall be recorded with the permit hard copy file. Photos of the sites with violations shall be taken during the inspection. On site notification of inspection findings shall



be provided at the time of inspection, if possible. Once the inspector's supervisor has reviewed the inspection report, if deficiencies were documented on-site, it shall be faxed or emailed to the permit holder as well as entered into Tidemark.

Final Inspection:

The inspector shall conduct final inspection to confirm that the site, including any permanent structural controls, is stable. Where applicable, final inspection shall include verification of the final landscape inspection. Stormwater infrastructure shall be inspected to ensure that, all pipes and structures are sealed and clear of any sediment deposition. Inspector shall verify that site conditions (especially structures) match approved plans, including any approved revisions that were approved by Plans Review staff. All information associated with site inspections shall be documented. Each inspection shall be recorded using the Construction Site Inspection Report, shown in Appendix G. Items associated with the inspection shall be noted on the report signed by the inspector. Copies of the inspection form shall be recorded with the permit hard copy file. In the case of repeat violations, information that will demonstrate that the violations have been corrected will be inserted into the files as well. Photos of the site shall be taken during the inspection. On site notification of inspection findings shall be provided at time of inspection in the case of an observed violation. Inspection information will be entered into the Tidemark system. Once the inspector's supervisor has reviewed the inspection report, if deficiencies were found on-site, it shall be faxed or emailed to the permit holder as well as to the contractor and entered also into Tidemark.

NONCOMPLIANCE ENFORCEMENT ACTIONS AND PROCEDURES:

Violations discovered during site inspections shall be duly noted. The inspector will attempt to resolve any site discrepancies from the issued permit with the site contractor or superintendent while onsite, in the field during each inspection. However, without assurance that all discrepancies will be addressed immediately by the site contractor or superintendent, the inspector may assume the matter will not be addressed and initiate subsequent enforcement actions. The levels of enforcement action are as follows:

- First Offense: Notification of Violation – written notification of violation (Written Warning Notice; see Appendix L)
- Second Offense: Compliance Order – will require specific corrective action be taken
- Third Offense: Cease & Desist Order

Documentation is critical to effective enforcement. All enforcement actions shall be recorded in the Tidemark System for tracking purposes. It is the responsibility of the inspector to maintain time limits, specified by enforcement levels, and re-inspect on appropriate dates. Timely follow-up inspection is critical. The Tidemark System will be used to schedule the follow-up inspections.

DOCUMENTATION REQUIREMENTS:

Documentation is critical to compliance with the City's MS4 program requirements. The following procedures shall be followed to ensure proper documentation of issued permits, inspections and enforcement is occurring:

Issued permit information shall be entered into Tidemark for project tracking.

- ✓ Site inspection reports shall be reviewed by the inspector's supervisor for completeness and accuracy of inspection
- ✓ A copy of the inspection report and enforcement, if provided to the site contractor or owner, shall be entered into the Tidemark system. All initial, routine, and final inspections and all enforcement actions shall be recorded into Tidemark
- ✓ Photos shall be uploaded to folders named with the appropriate permit number for the site. All photos taken for a given day shall be uploaded into a date specific folder within the site folder
- ✓ The inspector shall maintain all documentation of inspections conducted

TRAINING PROGRAM ELEMENT:

All City construction stormwater inspectors are certified as ADEM Qualified Credentialed Inspectors (QCI). Initial certification and annual renewal are encouraged and funded by the City's Stormwater Management Program.

As an outreach to make education and training materials and resources available to site operators, the City in partnership with other area MS4s and the Alabama Homebuilders Association provides semi-annual erosion and sediment control workshop training to homebuilders in the Greater Birmingham, Jefferson County area. This training is typically also attended by the City's Stormwater Inspectors with one providing specific training in the requirements necessary to obtain a permit from the City of Birmingham.

ANNUAL REPORT REQUIREMENTS

A copy or hyperlink to the ordinance or regulatory mechanism location on the Permittee's web site

A list of all active qualifying construction sites within the MS4

A summary of the following:

Number of construction site inspections

Number of formal enforcement actions and description of violations

Number of construction site runoff complaints received

Number of staff trained new and renewal

